Abstract: P631

Socioeconomic status; how does it influence referral to cardiac rehabilitation after acute myocardial infarction?

Authors:
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Topic(s):
Cardiovascular Rehabilitation

Citation:

Background: The number of patients with low socioeconomic status who are referred to cardiac rehabilitation (CR) has been documented to be relative lower than patients with high SES among all patients hospitalised with acute myocardial infarction (AMI).

Purpose: The aims of this study were to evaluate the referral process to CR and how it is influenced by socioeconomic variables.

Methods: In 2011-2014, 1229 patients were hospitalised with AMI at Department of Cardiology of our University Hospital, Denmark. All were evaluated for participation to CR. Socioeconomic status was measured by personal income, educational level, marital status, and employment and obtained from national registers. Multiple logistic regression assessed socioeconomic determinants in three phases of the referral process to CR: 1. information about CR, 2. wish to participate in CR, and 3. referral to specialised- or municipality-based CR. All analyses were adjusted for sex, age, and comorbidities.

Results: A total of 1123 (91.4%) patients received information regarding CR. Of these, 854 (69.5 %) patients wished to participate in the programme. Income was the most important socioeconomic variable when looking at who were informed about CR (OR 2.17, 95%-CI: 1.0- 4.64) and who wished to participate in CR (OR 1.55, 95%-CI: 1.02­2.35).

Conclusion: Two out of three patients received referral to CR. However, higher income was proportional with the likelihood of receiving information about CR and willingness to participate in the programme.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>All participants n = 1229</th>
<th>STEMI n = 402</th>
<th>NSTEMI n = 711</th>
<th>UAP n = 116</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (n, %)</td>
<td>907 (73.8)</td>
<td>322 (80.1)</td>
<td>503 (70.7)</td>
<td>82 (70.7)</td>
</tr>
<tr>
<td>Age Group (yrs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 65</td>
<td>591 (48.1)</td>
<td>227 (56.5)</td>
<td>308 (43.3)</td>
<td>56 (48.3)</td>
</tr>
<tr>
<td>65-74</td>
<td>371 (30.2)</td>
<td>116 (28.9)</td>
<td>215 (30.2)</td>
<td>40 (34.5)</td>
</tr>
<tr>
<td>≥75</td>
<td>267 (21.7)</td>
<td>59 (14.7)</td>
<td>188 (26.4)</td>
<td>20 (17.2)</td>
</tr>
<tr>
<td>Baseline Comorbidity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
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3 Aalborg University, Department of Clinical Medicine – Aalborg – Denmark,

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</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabtes</td>
<td>241 (19.6)</td>
<td>62 (15.4)</td>
<td>148 (20.8)</td>
<td>31 (26.7)</td>
</tr>
<tr>
<td>Charlson Comorbidty Index</td>
<td>1088 (88.5)</td>
<td>358 (89.1)</td>
<td>630 (88.6)</td>
<td>100 (86.2)</td>
</tr>
<tr>
<td>Low (0 points)</td>
<td>14 (1.1)</td>
<td>&lt;5 (&lt;1)</td>
<td>8 (1.1)</td>
<td>&lt;5 (&lt;1)</td>
</tr>
<tr>
<td>Moderate/High (&gt;0)</td>
<td>141 (11.5)</td>
<td>44 (10.9)</td>
<td>81 (11.4)</td>
<td>16 (13.8)</td>
</tr>
<tr>
<td>Civil status (n, %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/Partnership</td>
<td>793 (64.5)</td>
<td>253 (62.9)</td>
<td>449 (63.2)</td>
<td>91 (78.4)</td>
</tr>
<tr>
<td>Divorced/Unmarried/Widow</td>
<td>436 (35.5)</td>
<td>149 (37.1)</td>
<td>262 (36.8)</td>
<td>25 (21.6)</td>
</tr>
<tr>
<td>Occupational status (n, %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>479 (39.0)</td>
<td>195 (48.5)</td>
<td>240 (33.8)</td>
<td>44 (37.9)</td>
</tr>
<tr>
<td>Unemployed/Retired</td>
<td>750 (61.0)</td>
<td>207 (51.5)</td>
<td>471 (66.2)</td>
<td>72 (62.1)</td>
</tr>
<tr>
<td>Educational status (n, %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>516 (42.0)</td>
<td>144 (35.8)</td>
<td>322 (45.3)</td>
<td>50 (43.1)</td>
</tr>
<tr>
<td>Medium</td>
<td>539 (43.9)</td>
<td>201 (50.0)</td>
<td>293 (41.2)</td>
<td>45 (38.8)</td>
</tr>
<tr>
<td>High</td>
<td>174 (14.2)</td>
<td>57 (14.2)</td>
<td>96 (13.5)</td>
<td>21 (18.1)</td>
</tr>
<tr>
<td>Gross income, tertile (n, %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>405 (33.0)</td>
<td>113 (28.1)</td>
<td>251 (35.3)</td>
<td>41 (35.3)</td>
</tr>
<tr>
<td>Medium</td>
<td>406 (33.0)</td>
<td>124 (30.8)</td>
<td>247 (34.7)</td>
<td>35 (30.2)</td>
</tr>
<tr>
<td>High</td>
<td>418 (34.0)</td>
<td>165 (41.0)</td>
<td>213 (30.0)</td>
<td>40 (34.5)</td>
</tr>
</tbody>
</table>

STEMI: ST-elevated myocardial infarction; NSTEMI: non-ST-elevated myocardial infarction; UAP: unstable angina pectoris